of learning and its "faculty" including hundreds of scientists, specialists and professional men; its "student body," the people of the United States.

It is fact finding in that it searches out the presence of sickness, malnutrition, and insanitary conditions and distress and poverty among the primitive peoples of this country with the purpose of curing such disease, eliminating such insanitary conditions and relieving the distress and poverty by the application of remedial measures both with respect to disease conditions and in the building up of a better economic status among these people. Its nurses, its doctors, its matrons, its skilled specialists, are teaching preventive medicine as well as curative medicine to the thousands of beneficiaries of our Government through this department.

In the Interior Department medicine has come to mean the practice of theories of health which have been proven by experience together with the art and science of curing the sick.

## THE PROFIT AND LOSS ACCOUNT OF MODERN MEDICINE\*

By STUART McGuire, M.D. Richmond, Virginia

ONDERFUL progress has been made in medicine during recent years, but the profit has been attended by a loss which must be considered in balancing the account. In taking stock of the gain we will find inspiration for the future; in counting the cost we may guard against the undue sacrifices of the past.

The most distinct profit and loss are seen in medical education. About two decades ago it was recognized that an increasing number of low-grade practitioners were being graduated each year by medical colleges and licensed by state governments. An investigation of the medical schools showed that many of them were poorly equipped, had scant clinical material and lacked sufficient funds to secure the necessary time of efficient teachers. A deliberate and systematic movement was inaugurated to remedy this evil. By moral suasion, by state legislation and by the combined efforts of the better schools, the entrance requirements were advanced, the number and length of the teaching sessions were increased, the character and scope of the curricula were improved, and the minimum number and approximate pay of the full-time teachers were specified.

The result of this propaganda has been that the total number of medical schools in the United States has been reduced from 160 to 80, and the total number of medical students from 28,142 to 18,840. In other words, eighty medical schools, weak either educationally or financially, have ceased to teach, and 10,000 medical students not properly qualified for the profession have ceased to study.

The benefit of this movement is already markedly seen in the medical colleges, where the qualifications of the student are found improved and the character of the instruction more satisfactory. There has not yet been time for the benefit of the change to be very apparent in medical practice, but the lessened number and improved quality of the graduates turned out each year will unquestionably in the end result in a great improvement in the ethics and efficiency of the profession.

The profit, however, has not been without its loss, and while we congratulate ourselves on what has been gained by this educational movement, it is only just to count what it has cost. Many worthy, although struggling, colleges have been put out of existence and their property practically confiscated, and many earnest and promising young men have been denied an opportunity to study medicine because of some defect in their preliminary high school or college education. Again, the modern medical school is not self-supporting and is a heavy financial tax on public funds or private philanthropy. Expensive laboratories, salaries of full-time instructors and the necessary provisions for clinical teaching, impose a cost that can never again be met by tuition fees. If each student were charged what it actually cost to teach him, none but the rich could afford to study medicine. The rich, as a rule, do not care to become doctors, and as doctors are a necessity and not a luxury the rich will have to be educated to contribute of their wealth to make doctors. Medical education has ceased to be a business and become a philanthropic work which must be supported by state appropriations and individual benefactions.

Finally the cost of the modern method of teaching is seen in the graduate himself. If he has not paid in money he has been made to pay in time for his education. He has been kept in the laboratory, lecture hall and the hospital ward, a nonproducer, dependent on others for his support, until he reaches an age at which most of his contemporaries are married and settled in life. He is conscious of the sacrifice he has made, and usually overappreciative of the attainments he has acquired. He desires to be a specialist, and will only do general practice as a means to an end. He is determined to locate in a city and unwilling to settle in the country, preferring to starve himself in the one rather than to starve his ambitions in the other.

This results in an urban congestion and rural depletion of medical men which has reached a point to give serious concern, and for which some remedy must be found. It has been proposed that special medical schools be operated to produce low-grade practitioners for country consumption, but this is impracticable and unthinkable.

The remedy for the evil is to make country practice less arduous and more profitable, and it is hoped that this will come about in time with the evolution of our social, economic, and political life. When we compare the conditions that exist in the country today with those which existed even twenty years ago, and recall the changes that have resulted from the good-roads movement, the development of the automobile, the installation of the telephone, phonograph and radio, the introduction of the parcel post and rural mail delivery, the improvement of the public school system, the perfection of heating and lighting plants and the invention of labor-saving machinery, it is not difficult to believe that in the not far distant future the life of the country doctor

<sup>\*</sup>Read before the California Medical Association in General Meeting at the Fifty-Sixth Annual Session. April 25-28, 1927.

will become one that will attract and hold the best representatives of the profession.

Having considered the profit and loss account of modern medical education we now come to what we have gained and lost in the doctor himself. The physician of the old school was usually a gentleman by birth and breeding. He was given a classical education, not because of his future profession, but because it was a privilege accorded his brothers as well as himself, without reference to their future vocations in life. His preparation for practice consisted in reading medicine for a few months in a preceptor's office and then attending lectures for one or two years at a medical college. His very lack of technical training gave him independence and resourcefulness, and with experience he gained an ability to make a diagnosis by intuition and to apply treatment, which, while often empirical, was usually effective. He was no specialist but attended every member of the household, because a family was a unit and his art was catholic. He knew the constitution of his patient because neighbor married neighbor and lived where they were born. He was not only physician but friend, confidant and counselor as well. In his personal affairs he was unbusinesslike, rarely sending bills, but accepting such honoraria as were tendered him in settlement of his accounts. In public affairs he was prominent, and his views and opinion had weight in matters of church and state. He had his weaknesses and his faults. Measured by modern standards he was ignorant and sometimes mischievous, but he served well his day and generation and was a most lovable old aristocrat.

The modern medical man begins to be trained for his profession while yet a boy. His preliminary education in high school and college is scientific rather than classical, and gives him knowledge rather than culture. When he completes his four years' course in a medical college and one year postgraduate work in a hospital he represents an investment in time and money covering a period of from fourteen to sixteen years. He is no longer a boy, but an eminently practical man, and he regards his calling as more a business than a profession. He recognizes the fact that he lives in an age of specialization, that no one man can now meet all the professional needs of a patient, and that the day of the domination of the family physician on the one hand and the dependence of the family on the other has passed. He understands that with the freedom now customary of choosing different attendants to treat separate ailments, the factors of social position, family connection and even personal friendship count for little, but that a doctor is employed because he is believed to be the most efficient man available to relieve the patient or cure the disease. He recognizes the necessity of sobriety, industry, honesty and clean living, but he also knows that the public no longer measures experience by age, virtue by matrimony, or morality by affiliation with the church, and that the first and last prerequisite for success is professional ability.

Such being the situation with which he has to deal the modern medical man early chooses a special line of work, and devotes every effort and utilizes every opportunity to perfect himself in it. His attitude to the public has changed, and he no longer cloaks his reasons in secrecy or his actions in mystery, but deals frankly with his patients, explains cause and effect, and secures their cooperation in carrying out treatment. The modern doctor has discarded the silk hat and frock coat of his predecessor and put on the sack suit of the business man. In a sense he has become commercial. His offices are not only provided with instruments of diagnostic precision, but also with the most modern methods of keeping accounts and collecting fees.

From the foregoing crude pen picture must be inferred what has been the profit and what the loss to the public and to the profession from the modern doctor. We have lost a character dear to literature, and gained a successor perhaps less ethical and more mercenary, but certainly a scientific instrument of greater professional efficiency.

The development of the modern specialist is a source of both profit and loss to medicine. The profit is too apparent to need emphasis. The specialist, by concentration of study and limitation of practice to certain definite organs or diseases, is able in a few years to acquire a greater diagnostic skill and more successful methods of treatment in his special line of work than another man of equal ability would obtain in a lifetime of general practice.

The presence of a specialist in a community not only gives to patients suffering with certain diseases opportunities for efficient treatment, but also offers to the surgeon and general practitioner a consultant whose opinion and advice are often invaluable. While the profit side of the specialist's account is large, still on the opposite page we find some items of loss. The high esteem in which the specialist is held, and the pecuniary rewards which his services command have made him a victim of imitators and impostors, both inside and outside the pale of profession. Modern medicine is not responsible for the quacks and charlatans, but it is responsible for the members of the regular profession found in every town and city who claim to be specialists, but who really do a general practice, and for others who, while they may limit their work to certain diseases, are not qualified as experts, and have no more knowledge or experience than the average general practitioner.

Again the specialist, although an expert, is often narrow in his views and prejudiced in his opinions, so that he finds explanations for every symptom in the derangement of the organs he treats. His patients often suffer from special attention and general neglect. Motes are pulled out of the eyes and beams are left in the belly, or the abdomen is invaded for real or supposed appendicitis, and the lungs are left to fight their own battle with tuberculosis.

Finally, the specialist is an expensive friend to the patient. It is an everyday experience for the surgeon or general practitioner to send an obscure case, first to the pathologist for the examination of his blood, urine and sputum, then perhaps in turn to the roentgenologist, the cystoscopist, the ophthalmologist, and the dermatologist. The patient goes the rounds submitting himself to exhaustive exami-

nations and his pocketbook to depletion. The system is not essentially wrong. Unquestionably the patient is better cared for than formerly. To the well-to-do, while the cost is great, it is not prohibitory. To the poor, the public and private charities are open where they can get the same services dispensed in no less efficient but in less luxurious fashion. The real sufferer is the great middle class. Caught between penury and pride, without the price to pay but with the desire to conceal their poverty, they are often limited to an inferior grade of service.

Teamwork is essential to carry out the modern system of examinations. It is best seen in the staff of a dispensary where every patient has at his command the services of specialists in all diagnostic lines. This method has given such satisfactory professional services to the poor that an attempt is now being made in numerous parts of the country to apply it to those who are able to pay in the form of the modern medical clinic.

These clinics consist of a number of physicians, surgeons, and specialists united as a firm or corporation who occupy a building especially designed for the purpose to which it is devoted where patients can be conveniently, expeditiously and efficiently examined and treated and charged a combined bill through a central office for the entire services rendered.

The advantages of a clinic to a patient are that he has immediately available the opinion and advice of various specialists. He has the benefit of laboratories equipped with instruments of modern diagnostic precision. He is carefully and systematically examined and abnormal conditions of which he was ignorant are often discovered in time for their arrest or cure. He is charged a single fee for the diagnostic study of his case which does not exceed a fixed amount. The objections of the system to a patient are that to a degree he sacrifices his individuality and becomes less a person and more a case. He has to trust to the reputation of the clinic for the ability of the specialists to whom he is referred, and while all clinics have specialists it is equally true that all specialists are not experts.

He is subjected to a routine method of examination which works the greatest good to the greatest number, but sometimes imposes an individual hardship, as it may yield negative results, and the only benefit to the patient is the satisfaction of knowing he has been thoroughly studied and that he has no organic disease. Again a patient may learn from a complete examination that he has some unimportant physical disability of which he was previously ignorant, and once possessed of this knowledge he may be obscessed with a desire to have it corrected and insist on submitting himself to unnecessary or even injurious treatment.

The advantages that a clinic offers to a member of its staff are that he is free from professional expenses and has a guaranteed salary, and if the clinic prospers he will prosper with it. He is relieved of business worries that go with private practice and can devote his time and thought to professional work. He works in an agreeable atmosphere, comes into frequent contact with congenial associates, and is stimulated mentally by the pro-

fessional problems that are discussed daily at small conferences and more formally at the regular meetings of the staff. The greatest joy, however, comes from his satisfaction of feeling that he has the opportunity and facilities for doing high-class work, and that in doubtful cases he can share responsibility by calling in consultation other members of the staff in whom he has trust and confidence.

The objections of the system to a member of the staff are financial and personal. No mature professional man who has achieved marked financial success can become a member of a clinic with the expectation that his salary will ever be as large as the money he previously earned in private practice, and no young man beginning the practice of medicine can enter a clinic with the hope that he will ever earn as much money as he would do if he ultimately attained conspicuous success in private practice.

The answer to the objection as it applies to the older man is that if he continues his work as an individual he must struggle on despite failing strength and health, and when he dies his work dies with him, whereas if he becomes a member of a clinic he can retire gradually and gracefully, and when he dies his work will be carried on by the organization. The answer to the objection as it applies to the younger man is that the salary paid by the clinic offers the certainty of a comfortable living, that the work in the clinic gives him a training and experience which will lead to the development of his professional ability, and that if later in life he is dissatisfied with the position in which he finds himself he can resign from the staff when an advantageous opportunity offers.

The personal objections are a little more difficult to state and answer. A man when he becomes a member of the staff of a clinic loses in some degree his independence and in all of his actions he will have to consider how what he does will effect the interest of the clinic. Again, becoming a member of a clinic, while it tends to closer personal friendships within the organization, sometimes leads to a narrowing of the circle of acquaintances, or even possibly the alienation of former friends. It is very important for a clinic to minimize this danger by the adoption of a proper policy and the maintenance of a generous attitude to the general medical profession. If this is not done the members of the staff may suffer from professional isolation and even professional ostracism.

A medical clinic is no royal road to success. At the beginning the sum total of the patronage will be less than the sum total of the patronage of the individuals who constitute the staff. If the patronage grows, it will be for the same reason that the individual succeeds, namely, a recognition by the public and profession of satisfactory service rendered.

While a medical clinic is a business enterprise and its primary purpose is the care of the individual patient, it would be a poor group of professional men who would not strive to develop the possibilities it affords for philanthropic, educational, and scientific work. Means should be provided for the examination and treatment of indigent patients, courses should be established for the instruction of nurses, dietitians, technicians and medical graduates, an advantage should be taken of the opportunity offered by the combination of clinical and laboratory facilities to carry on research work.

To achieve its highest success, a medical clinic should not only have a body and a brain, but a conscience and a soul as well.

One of the most wonderful gains made in modern medicine is in the exact diagnosis of disease by laboratory methods. For a time our knowledge of etiology and pathology was vague and indefinite, but one after another great discoverers have cleared the field and given us definite facts with which to work. Diatheses and dyscrasias, miasmatic and idiopathic diseases are no longer mentioned; the terms scrofula, blood poison and typhomalarial fever are no longer employed, and even the identity of neurasthenia and autointoxication are questioned.

We now diagnose the existence of tuberculosis, not by hectic fever, but by the demonstration of Koch's bacillus. We diagnose malaria, not by the therapeutic test of quinin, but by the presence of the plasmodium of Laveran. Widal has given us the agglutination test for typhoid and Wassermann the reaction which shows the presence or absence of syphilis. The white blood count tells the degree of infection and resistance of the patient, and is not only a test of importance in making prognosis, but often indicates the proper time for intervention. The microscopic examination of tissue differentiates benign from malignant tumors, and in operation for cancer the frozen section will often tell the surgeon when he has reached the limit of the disease. The x-ray shows the existence of fractures and the position of fragments, locates the presence of stones in the kidney, ureter or bladder, and by perfection of technique demonstrates the passage of a test meal from the stomach to the rectum, and even visualizes the filling and emptying of the gall bladder with bile.

The inspection of the modern laboratory is impressive to the visitor. The rows of reagents, retorts and test tubes; the microscopes, centrifuges and microtomes; the refrigerators, incubators and culture media; the polariscopes, hematocytometers, sphygnomanometers and other instruments of precision make a layman, and even some of the profession, think that the work done and the final report made must settle all questions in a given case.

But the laboratory method of diagnosis entails a loss as well as a gain, and has its dangers and disadvantages. While it is true that chemical reactions are always constant, that the microscopic field shows the cellular structure of tissue and the physical form of bacteria, and that the x-ray picture truly depicts the shadow of the object between the Crooke's tube and the photographic plate, it must always be remembered that there is a personal and uncertain factor in the result, namely, the laboratory man who construes what he sees. A poor pathologist or roentgenologist is worse than none at all, and even the opinion of the most experienced and proficient is occasionally wrong.

As valuable as are his services, the laboratory man

is sometimes too highly regarded. Seated upon his kingly stool and surrounded by a rarefied scientific atmosphere, he tends to tyrannize the clinician. His reports are too often accepted as final in their decrees and become enervating in their influence. Owing to a tendency to lean too much on laboratory reports, case histories and bedside records, the profession is in danger of neglecting the examination of the patient. Sick people are just as instructive today as in the time of Sydenham, Addison, and Bright. Laboratory data and clinical findings must be studied together. They must be compared, and one used to check a possible error of the other.

The hospital, while an old institution, is modern in its distribution and function. It has lived down its stigma of a death house. It has overcome the prejudices of the masses and appealed to the pride of the classes. Practically every town of 5000 inhabitants has a hospital, and every well-regulated hospital is an asset to its community. A hospital is now accepted as the safest, most comfortable and most economical place for the seriously sick, and it is also recognized as a local center for the dissemination of knowledge among the public, the training and education of nurses, and the uplift of the profession by the demands made for good records, thorough examinations, accurate diagnoses, and rational treatment.

The modern hospital, however, is not without its dangers and disadvantages, as it offers opportunity and hence temptation to members of its staff, especially those with surgical ambition, to undertake work for which they are not qualified. The following is a familiar illustration: A small town feels the need of a hospital. The women organize, raise the money and build one. The people of this community had formerly made it a practice to go to some neighboring city when in need of special medical treatment or a serious surgical operation. They are now urged to patronize the home hospital, and as that course appeals to their desire to help a local institution, and also avoids separation from family and friends, the advice is often followed. For a time an experienced surgeon is sent for to operate on difficult cases, and one of the local practitioners acts as his assistant. The successful result which usually follows in these early cases inspires the community with confidence in the hospital, and in time creates a desire in the mind of the local man to do the work himself. He spends six weeks or three months at a postgraduate school, and returns with a highly embellished certificate. He performs a herniotomy or removes an appendix and the patient does not die. He comes to be known in the community as a man of wonderful nerve. He hopes later to drop his other work and do nothing but surgery.

The evil goes further. This newly developed surgeon has no regular assistant, and makes it a rule to get the family doctor of the patient to help him with the operation. As the physician does part of the work it seems only proper that he should get part of the fee. When this practitioner has a patient who desires to go to a specialist in a large city, what is more natural than that he should go with him, and explain that he was reluctant to come be-

cause of the loss of the financial benefit he was accustomed to receive from such cases at home; or what more human than for the city surgeon to endeavor to meet this competition by offering to split the fee in this and future cases provided it was made sufficiently large; and what more necessary than that this secret understanding between the two be kept from the knowledge of the patient. And so has come about the great modern evil of the secret division of the fee, a practice by which the doctor sells the patient to the highest bidder, and by which the surgeon robs the patient to pay the doctor.

The evil of incompetency in the shape of the unqualified surgeon, and the vice of dishonesty in the form of the secret division of the fee, are being fought in the profession by the American College of Surgeons and other organizations. If the remedy is not found, action will be taken sooner or later by an indignant public through state legislation.

The advent of the trained nurse marked the epoch in medicine almost equal to the introduction of anesthesia and antiseptics, and the name of the founder of the order, Florence Nightingale, deserves to rank with those of Long, Pasteur, and Lister. The rapid and general adoption of the trained nurse was due not only to the professional needs of the doctor, but also to the domestic necessities of the public. In times past a sick person was nursed by servants and relatives. In every family there were old mammies and old maids who had considerable practical experience in nursing, and who derived a certain morbid pleasure from the temporary authority of the sick room. The modern servant problem, and the recent migration of the unmarried female members of the family from the home to the office, did away with the supply of amateur nurses and created a demand for the professional nurse.

At one time there were but two respectable things for a young woman to do, get married or teach school. Now many avenues are open to them, and of these none is more attractive or offers greater opportunities for service than the field of nursing.

Time will not permit an attempt to show the contributions of the trained nurse to the progress of medicine. In every department she has proved a faithful, efficient and trusted worker, without whose aid the end attained could not have been accomplished. At the bedside of the patient in the silent vigils of the night, in the operating room during the stress and strain of nerve-racking ordeals, and recently in Europe on battlefields torn with shell and red with carnage, she has shown a courage, a fixity of purpose and a devotion to duty rarely equaled in either sex or in any profession.

The nurse is a woman and therefore has her faults, but the faults are those of a woman, not of the nurse. If she is sometimes spoiled, occasionally a trifle tyrannical, and more rarely a bit supercilious from real or supposed superiority of knowledge, it shows the weakness of her sex and not of her profession. If her services are sometimes prostituted to

pamper the whims of the neurasthenic invalid, or to indulge the selfish indolence of the idle rich, it is not her fault but the fault of our present system of living.

The medical society is an important factor in the progress and development of medicine. While some members of the profession do not appreciate the advantages to be derived from regular attendance and active cooperation in medical organizations, it is a fact that the busy and successful practitioners are usually present at all the meetings of their county, state, and national associations. This can only be explained by the fact that those of the profession whose experience and judgment have proved to be the soundest believe that medical meetings are profitable.

Medical societies usually hold their regular sessions in different cities, and their meetings educate and stimulate the local profession, and advertise to the laity the fact that medicine is not bound by dicta and dogmas, but is a progressive science ready to discard the old if it is proved to be fallacious, and to adopt the new if it is found to be of value. The meeting of a medical society enables its members to read papers, thus giving them a legitimate opportunity to show their capacity; and to present new and original views as to the treatment of disease, thus adding to the knowledge of the profession. It enables its members to hear papers read by others, thus giving them an opportunity to gain an amount of information they could get in no other way with so little labor and in so short a length of time. The discussions that follow these papers are especially profitable. In them is an impressive personal element that is totally lost in the stenographic report published in the transactions.

In addition to the educational and professional advantages derived from these meetings there are the equally important social and personal benefits. The occasion is a holiday, a recreation, a vacation. It breaks the monotony of life and enables a man to do better work when he returns home. It offers the opportunity to meet men who are doing the same kind of work in different sections of the country, and results in pleasing and profitable acquaintanceships which often lead to permanent friendships. And last but not least, it brings together men who live in the same community but who, owing to petty jealousies or lack of time for social intercourse, see little of each other. Either in the session of the society, or in the committee room, or on the journey to and from the place of meeting, they are thrown into an intimate contact which frequently leads to explanation of misunderstandings, adjustment of differences, appreciation of good qualities, and to the establishment of the most friendly and cordial relations.

Despite the manifest and manifold benefits of the medical society, it is necessary from the profit to deduct a loss. There are many medical societies which have no right of being, and have been organized simply for political or personal motives. Originally established to give office or secure patronage

for a certain group of men, they are often supported for years through a mistaken pride or patriotism on the part of their members, to the great injury of the legitimate societies whose territories they cover. There is need for a movement to standardize medical associations, and until this is done through the proper channel the profession should try to minimize the evil by withdrawing its membership from superfluous organizations.

Twenty years ago it was considered derogatory to the dignity of one clinician to visit the workshop of another. To do so would be to invite the criticism of a confessed inferiority, or of a desire to spy on the work of a competitor. Then all one practitioner knew of the work of the other was through printed matter, and some things that were true were not believed and some things that were not true were accepted. It has now become almost a custom for a busy surgeon and physician to devote two or three weeks of the period previously assigned for a vacation to the duty of seeing, at first hand, what his fellows are doing. At the various recognized medical centers every provision is made for the convenience and instruction of visiting doctors. No fees are charged and the veriest stranger is made to feel welcome. By actually observing the methods practiced in these various clinics the visitor is able to decide whether or not they are preferable to the technique he had hitherto employed.

Surgeons as a rule attend clinics more frequently than do physicians. This is a pity, for even in a strictly surgical clinic the points of greatest interest are not the methods of operating, but the explanation of symptoms by the pathological conditions found. It is a curious fact that many physicians who would travel miles to see a post-mortem examination will not go around the corner to witness an operation which demonstrates the same changes produced by disease in living tissues before they are obscured by terminal results. To correct the loss entailed by the failure of the average physician to avail himself fully of the advantages offered by the modern clinic the internist must learn that to keep abreast of the times it is necessary not only to study but to travel as well.

Time will not permit a record here of the victories that have been achieved in preventive medicines, beginning with smallpox and now approaching a successful issue in the case of yellow fever, malaria, typhoid, and other diseases. The completion of the Panama Canal, a task rendered possible only by the sanitary regulation promulgated and enforced by Surgeon-General Gorgas, stands as an unquestioned tribute and enduring monument to the perfection and efficiency of the measures which modern science has developed for the maintenance of health and the prevention of disease.

The Public Health Service is now recognized as one of the most important departments of our general and local government. The work in this service offers the present-day graduate one of the most attractive fields open to him. It does not hold out the promise of fortune that goes with rare eminence

in private practice, but it guarantees to every worker a reasonable income, the opportunity for scientific study and research, the certainty of performing a useful service for his community, and the possibility of becoming a great benefactor to the human race.

Public health work marked the beginning of a new era in the relations between the profession and the public. It was characterized by an effort on the part of the profession to take the public into its confidence. Its purpose was to make the people a partner in the conservation of health. A short time ago if a doctor addressed a lay audience on a medical subject his motives were questioned. Now the profession employs every agency of publicity to spread the propaganda against disease. The columns of the newspapers and magazines, the walls of public conveyances, the lecture platform, the pulpit, the school, and the drama, warn and plead against the danger of the mosquito and house fly, the communicability of tuberculosis, the insidiousness of cancer, and the pathos of "Damaged Goods."

Publicity in medical matters has undoubtedly done good, but it has also done harm, and here as elsewhere we must record not only the profit but the loss.

The first loss is seen in the schools, for an examination of the textbooks employed in physiology and hygiene will show that just as at one time our children were taught false history, so now they are often taught false science. Another evil is the attempt to teach sex hygiene. It is a difficult question to decide in an individual case when and how to impart this delicate information. If parents hesitate to discuss the matter with their child at home, it is certainly an evasion of responsibility attended by great danger to turn the subject over to an old-maid teacher to deal with in a mixed school.

Finally, while ignorance is not innocence, the general information given the laity on medical subjects has caused a loss of one of those indefinite charms formerly possessed by women. Matters are now discussed in a mixed audience with a freedom and frankness that would have been thought unbelievable a generation ago. Beginning with coeducation and equal suffrage, subjects suggestive of sex differences, the field of activity of the female mind has broadened, until now the average high-school girl is more or less familiar with the problems embraced under the terms eugenics, race suiside, the social evil, the age of consent, the white slave traffic, and the regulation of the red light district.

The woman of today has lost her prudery. Let her beware lest she lose her modesty as well! If such should prove the case it would be necessary to change from the credit to the debit side the balance now found in the "Profit and Loss Account of Modern Medicine."

NOTE: The paper by J. Edward Harbinson, M. D., and John D. Lawson, M. D., of Woodland Clinic on the "Treatment of Erysipelas by Roentgen Ray," published in the April, 1927, issue of CALIFORNIA AND WESTERN MEDICINE, was read before the California Northern District Medical Society on May 27, 1926.